Newsletter of YunTech

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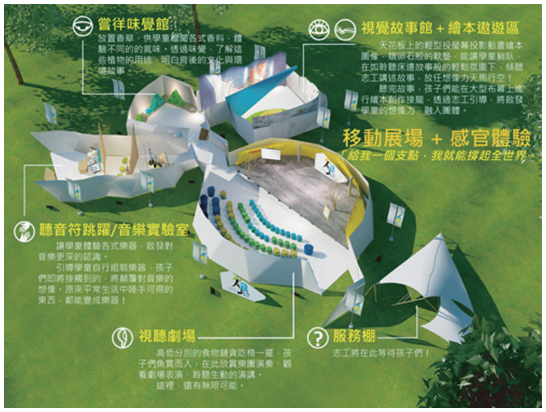
Awards and Commendation



Interior Design Award and an industry-sponsored award (Department of Creative Design) for “The Pivot”

The Generation Leading the Way

YunTech Snares 2 Silver, 1 Copper and 5 Industry Sponsored Awards!

The International Young Designers’ Exhibition (YODEX) is an annually held global design co-exhibition bringing out the rich, dynamic power of Taiwan’s new designers. The number of entries in the year 2012 reached 3376 from 124 departments in 59 schools. The results were released on May 20th. The College of Design, by snatching 2 silver, 1 copper and 5 industry-sponsored awards worth a bonus of NT. 85,000, presented the innovative drive and power of YunTech among the many schools that participated.

Instructed by Professor Jui-che Tu, students Shin-chi Tsou and Yu-tsou Chien of the Department of Creative Design invented the product “The Pivot,” which grabbed silver in the category of Interior Design. The design concept involved combining three elements: vision, place and product design. The main concept was based

on imagination, a super ability in children; when a pivot is given, it is believed that children will be someone influential in the future. The invention is a model that provides multiple educational experiences including sensory experiences, speeches, opera, and others. It is hoped that the invention can promote the concept of establishing a one service institution in communities that activates participation.

Granted a silver in the category of Communication Design, the invention “Wan gu Station” was created by students Wei-chen Hsie and Yu-ru Chiu of the Department of Visual Communication Design under the instruction of Assistant Professor Li-shu Lu. Over the past centuries, Taiwan has cultivated its own culture. However, one taboo for all Taiwanese people is customs relative to funeral ceremonies. As less and less people discuss the ceremony, only few people can have the chance to understand its real meaning. With the convenience of the internet, Taiwanese people have become more open-minded, yet a discussion of funeral ceremonies still doesn’t happen online. The invention adopts the psychological concept of grief counseling in the creation of an interactive online platform to overview traditional funeral ceremonies in digital film mode, easily immersing the audience into the ceremony..

Under the instruction of Professor Chi-hsiung Chen, students Bei-yi Song and Kang-hua Lan of the Department of Creative Design invented the product “Newborn-Single Relaxing Sofa”, which was granted copper in the category of Industrial Design. The design concept was based on a set phrase, “it keeps raining in forests in the wild. Bamboo shoots grow from the ground and the shapes of the bamboo shoots make them dragon-like.” The shape of the newborn bamboo shoots growing from the ground show their strong energy. By transforming their form, the inventors tried to strike a balance between bamboo craft and industrial concepts. Eventually, the brand-new single seating sofa “Newborn” emerged.

The 5 industry-sponsored awards were as follows:

Interior Design: The Pivot

Inventors: Shin-chi Tsou and Yu-tsou Chien of the Department of Creative Design

Instructor: Professor Jui-che Tu

Industrial Design: Newborn-Single Relaxing Sofa

Inventors: Bei-yi Song and Kang-hua Lan of the Department of Creative Design

Instructor: Professor Chi-hsiung Chen

Product Design: Hook On

Inventors: Bo-chi Chang Yuan and Min-che Chang of the Department of Industrial Design

Instructor: Associate Professor Sheng-chi Lin

Product Design: Foldable

Inventors: Pei-hsuan Hsu and Men-fang Tsai of the Department of Industrial Design

Instructor: Associate Professor Sheng-chi Lin

Product Design: My Frame

Inventors: Shi-wei Chen and Shien-ying Hsie of the Department of Industrial Design

Instructor: Associate Professor Po-shiung Yeh

Communication Design Award (Department of Visual Communication Award) for “Wang gu Station”

Industrial Design Award and an industry-sponsored award for “Newborn-Single Relaxing Sofa”

YunTech Wins the 17th Prize and is Selected as One of the Best 80 Institution at the 2012 Electrolux Design Lab

In order to foster more outstanding designers in the world, a Design Lab, which is hosted every year, was established by Electrolux Company, Sweden.

The basic concept of the Electrolux Lab is to create the lifestyle of the future. Students can use their imagination to determine what the design of household appliances will be like in the future. Students are challenged to design household appliances with not only their creativity but also some green design concepts in keeping with environmental sustainability. Design students all over the world are inspired to create a wonderful life for the future.

To encourage design students of Taiwan to participate in the competition without any worries, Sakura Company, Taiwan, provides extra bonus to participants. The best 25 receive a bonus of NT. 30,000.

Instructed by Associate Professor Sei-wo Tseng, graduate student Fu-chun Wan of the Department of Industrial Design invented the product “Tempo Blender” which was granted the 17th Prize at the 2012 Electrolux Design Lab. Based on the concept of energy-saving and environment-friendliness, our sense of hearing and the cooking process are integrated, making cooking blissful as we hear musical performances. The invention is a blender which assists us in making sauce easily and making tasty cocktails. The thing we need to do is follow the instructions on the interface of the blender and add the right amounts of the ingredients into the blender, then turn on the musical blender to produce an energizing experience. By following all the steps, we can cook delicious dishes in an eco-friendly way under the influence of music. Imagine making Thai Spicy Sauce with Thai music. Not only are you guaranteed satisfaction in your taste but your hearing sense can be inspired during the cooking process.

The work “Spotlight” invented by the graduate student, Chin-chie Lin of the Department of Industrial Design under the instruction of Professor Po-shiung Yeh and Professor Ching Yang was selected as one of the best 80. The work tries to convey the concept that a cooking process is like a stage drama, a cooker is like a stage, ingredients are like actors and actresses and lastly the cook plays the role of director. Spotlight cooker hoods are the stage spotlight which light up the ingredients and adjusts the smoke needed for the drama. Spotlight cooker hoods can be moved up and down. When we are cooking in different ways, we can adjust it to the height to exhaust fumes in the most efficient way. By adding foaming filter in the fans, the electric charges will be attracted to static electricity so as to filter fumes. When cleaning filters with the exclusive cleaning equipment attached to the invention, the fumes on the filters will be removed by electrolytic reduction, making it easy to clean the filters.

Introduction to the product “Tempo blender”

YunTech Wins 6 Awards at the 2012 Invention Innovation and Technology Exhibition in Malaysia!

The 23rd Invention Innovation and Technology Exhibition (ITEX) took place from May 17th to 19th at the Kuala Lumpur Convention Centre in Malaysia. Led by Chair Shin-min Hsieh of the Taiwan Invention Products Promotion Association (TIPPA), the Taiwan delegation presented a total of 191 inventions at the exhibition.

It was the first time that YunTech participated in the exhibition but the performance was outstanding. YunTech won 2 silver and 4 copper awards at the exhibition. The silver awarded good work “Portable Water Purifier” was invented by a group formed by Assistant Professor Chen-yuan Liu and his students. The invention was based on the trend that more people live away from their hometowns nowadays and the problem of access to pure drinking water. Assistant

Professor Liu stated that this green design invention was also granted awards at innovation competitions in European countries and the United States.

Led by Associate Professor Shih-ying Chang, the team comprising Long-chuan Tsou, Dong-han Chuan, Hen-huan Lei, Chen-kai Li, Wei-chia Huang and Yang-chih Shen invented the work “Components of Active Soldering Fillers.” This invention allows for soldering at a low temperature, reduces manufacturing costs and the number of resources needed, and makes ways for a more efficient wielding process.

Instructed by Professor Jung-chuan Chou, students Min-shun Wu and Jen-chen Chen invented “The Sensing System of Radio Identify Solution.” Professor Chou stated that the work integrated ion sensing with a radio identification system, and we can monitor signals sent by a human-computer interface which can be applied to the internet, helping us to acquire instant detection, conduct distant monitoring and measure different spots at the same time. Therefore, the work can be further applied to food manufacturing, industrial factories and school experiments. Due to the advantage of distant monitoring, work efficiency will be higher.

The invention “The Examination Method for Gravers with Size Parameter and the Equipment” was invented by students Bin-shien Chuan and Shian-Yu He under the instruction of associate professors Yung-chen Wang and Reo-chan Lin. Associate Professor Wang explained that the examination method was designed to lessen the past mistakes made by humans; hence the precision and efficiency are better than the traditional method. The method can also be applied to milling cutters, drills and other kinds of tools.

Instructed by Associate Professor Shih-ying Chang, the team made up of students Hen-huan Lei, Yu-kai Lin, Min-hua Su, Chau-kai Lin and Shin-ti Chen created the invention “The Welding Method for Aluminum Alloy Soldering.” According to Associate Professor Chang, this copper awarded invention involved a welding method for aluminum alloy soldering using ultra-sound as a helper for welding without flux. Without using flux in the welding process, the possibility of environmental pollution and the corrosiveness of brazed surfaces can be avoided. The invention “The Manufacturing Method for Double Heat Removal” was created by the team comprising Hen-huan Lei, Wei-kin Chen, Chi-jung Fu, Juo-yang Hsu and Kuo-chan Chang. The invention can increase heat pipe thermal conductivity and be widely applied to electronic cooling, LEDs, solar thermals, communications, and so on

YunTech had already been granted 2 golds, 3 silvers and 1 copper at innovation competitions in Mexico and Geneva. YunTech won 2 silver and 4 copper at ITEX this time, showing the outstanding performance of faculty and students. The new innovation and inventions have been praised again at international occasions. YunTech will work hard in encouraging students to create more innovations and in becoming a globally renowned university.

“Portable Water Purifier,” the silver awarded invention by the team of Assistant Professor Chen-yuan Liu of Department of Visual Communication Design.

YunTech Had an Outstanding Performance Again at the 2012 Moscow International Salon of Invention and Innovation Technologies, Archimedes!

The 15th Moscow International Salon of Invention and Innovative Technologies, Archimedes was held from March 20th to 23rd. The number of entries was more than 1,000 from nearly 20 countries. YunTech presented 2 inventions and they were granted one gold and one silver awards.

The invention “Calcium Ion Sensing Units and Fabrication Method and Sensing Systems Comprising the Same” invented by students Chi-hua Lee and Che-wei Lee of the Department of Electronic Engineering

under the instructions of Professor Jung-chuan Chou and Professor Tsung-sum Lee was granted gold. Most beverages on the market contain calcium ion, and the highest dietary intake of calcium for each adult is 1000 mg per day. Professor Chou stated that the invention selects electrodes which cause the calcium concentration of the solution to become more stable. It is also integrated with a sensor. The invention can be applied to semiconductors, biological industries and daily water quality analysis. This invention was granted copper at the 2011 Taipei Int'l Invention Show and Technomart.

Instructed by Associate Professor Shih-ying Chang and Long-chuan Tsou, students Li-chan Liu, Hen-huan Lei and Yen-chi Shen of the Department of Mechanical Engineering invented the technique "Active Solders for Low Temperature Joining Ceramic to Metal in Air," which was granted silver. Copper was directly covered on alumina or alumina substrate. The technique is the best solution for high-power semiconductors that are insulated and thermal management. The soldering technique used under low temperature presented by this invention can improve on the disadvantages occurring in the ceramic joining process, namely thermal stress, high cost and time consumption. The technique is low cost and can also be applied to heavy industries. By overcoming the bottlenecks of metallization in the ceramic soldering process, this invention meets the needs for information, communication, consumer electronics such as high-power LEDs, and the application of semiconductor assembly industry. The technique can be an efficient solution for microelectro mechanical products. Highly praised at domestic and international occasions, the invention won gold at the 2011 Exhibition of Inventions, Geneva and silver at the International Warsaw Invention Show.

Since last year, YunTech has won several big awards at different international innovation competitions. At the 2012 Moscow International Salon of Invention and Innovation Technologies, Archimedes, YunTech had an outstanding performance compared to other institutions. YunTech will persist in fostering students into professionals with a knowledge-management ability, internationally competitiveness, and who place an equal emphasis on humanities and technology in contributing academic power to society.

Academic Exchanges

Signs the Agreement of Academic Cooperation with Dayeh University! YunTech is Truly a New Model for Technological Universities!

YunTech is the only university selected by the Ministry of Education (R.O.C.) for "Subsidy Directions for Developing Technological University Paradigms," To serve all the partner universities in central Taiwan, YunTech and Dayeh Univeristy signed an agreement of academic cooperation on June 19th, 2012, at the administration building of Dayeh University. It is hoped that the experience of YunTech in Subsidy Directions for Developing Technological University Paradigms can be developed and passed on to other universities.

The core concepts that YunTech works for are academia-industrial cooperation and brand-new design, which led to YunTech being selected as the top university for the Subsidy Directions for Developing Technological University Paradigms. As a flagship university nationwide, YunTech has excellent faculty and students who form highly capable academia-industrial research teams with not only outstanding performances in various fields but also awards at international competitions.

YunTech does not only seek the better side of itself, but also shares its know-how with other universities and establishes close relationships with them. Yuntech's cooperation with them includes co-advising students, inter-college course selection, research, and so on. Besides providing a free and wide-learning environment for students, inter-college research is conducted. Through cooperation and experience-sharing between universities, YunTech plans to become a model for other universities nationwide.

Agricultural Products of Yunlin Introduced at International Conferences

President Yeong-bin Yang delivered a speech and welcomed more than 300 domestic and international

scholars at the 2012 International Conference on Information Security and Intelligence Control and Symposium on Digital Life Technologies held on August 15, 2012. More than 200 papers were published at the 3-day conference. The diverse presentations and discussions, aimed at furthering research on the issue of a better living environment, focused on place design, products concerned with human care and well-being, different living contexts and intelligent living environments.

Professor Narendra Ahuja of the Department of Computer Science- ECE Illinois, University of Illinois at Urbana-Champaign, U.S.A.; Chair Pau-choo Chang of the Department of Electrical Engineering at National Cheng Kung University, Taiwan; Head Maurice Pagnucco of the School of Computer Science and Engineering at the University of New South Wales, Australia; and Professor Cheng-I Chang of the Department of Computer Science and Electrical Engineering at the University of Maryland, U.S.A. were invited to deliver speeches and discuss the latest research and issues on information security and intelligent control in today's fields. Chair Chang, Professor Chang and Professor Ahuja are globally known IEEE fellows.

Besides informational products exhibited at the conference, local agricultural products of Yunlin were displayed. Peanut oil, soy sauce, coffee and traditional puppets were offered as gifts to guests and presenters. They did not only attend the big event but also experienced the loha life style and enjoyed the delicacies of Yunlin so as to relieve their pressure.

Professor Maurice Pagnucco was delivering a speech at the 2012 International Conference on Information Security and Intelligent Control.

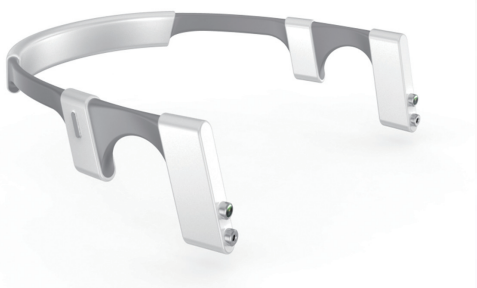
Outstanding Performance

Department of Industrial Design, YunTech, Wins 1 Silver and 2 Good Work Awards at the 9th Y.S. Award

The 9th Y.S. Award held by Y.S. Educational Foundation has already come to a close! YunTech won 1 silver and 1 good work award last year, but this year saw YunTech winning 1 silver and 2 good work awards. As students participated in the competition enthusiastically, the foundation also granted YunTech a "Group Award."

The main topic of the category of industrial design was "Moving." During the 6 month competition, 327 out of the 739 entries competed for awards in the category of industrial design. After submitting proposals at the preliminary, designing video clips at the semi-final and conducting presentation in the final, the results were released at the contest's grand awards ceremony held on April 13th. YunTech won 1 silver and 2 good work awards in the 2nd year.

Category of Industrial Design: Cloud Navi
Inventors: Graduate students Hau-hen Hsie and Fan-chun Tsai of the Department of Industrial Design
Instructors: Chair Po-shiung Yeh and Associate Professor Deng-chuan Cai
The design concept of the invention "Cloud" in focusing on providing chances to the blind to enjoy the convenience of intelligent mobile devices was coherent

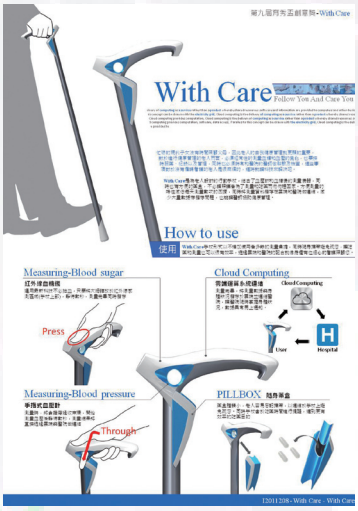


The silver awarded invention "Cloud Navi"

The good work awarded invention
“Listen to It”

with the main topic of this competition. The invention is a head-mounted mobile device featuring a GPS system, image recognition, voice assistant, and so on. With great operational capability and convenience in using the cloud system, the device can help the blind with things that used to be inconvenient.

Category of Industrial Design: Listen to It
Inventors: Yuan-chin Chiu, Yi-ru Li, Ya-dien Tsai and Yu-chun Tsai of the Department of Industrial Design
Instructor: Professor Chin Yang
The invention “Listen to It” is an easy-using manufacturing electronic label writer. Through interactions with the label writer, which is like playing on pipes, the blind will feel how normal people feel. During their daily lives, there is some inconvenience for the blind. For example, they cannot distinguish some objects. Bottles and books have no big difference to them. They also have difficulty in searching for objects. Though existing label writers help the blind to distinguish objects, they do not tell them the locations of objects. Therefore, the invention “Listen To It” was invented to help them in this regard.



The good work awarded invention
“With Care”

Category of Industrial Design: With Care
Inventor: Yu Lin of the Department of Industrial Design
Instructor: Professor Chin Yang
The invention, “With Care,” is a mobile cane designed for the old. A blood pressure gauge, a blood-glucose meter and a medicine box are featured in this mobile cane, reducing the need for caretakers to rush home to measure the blood of the elderly or have them take medicine. As for the convenience of measuring, it reduces the frequency of measuring. The data is linked to and automatically stored in the hospital’s system by a cloud system, thus reducing the amount of stored data and increasing the chances of doctors’ assistance.

YunTech Wins Awards at the 2012 Youth Technology Expo!

The 2012 Youth Technology Expo hosted by the Ministry of Education (R.O.C.) took place from May 24th to 26th at Celerity Pacemaker, Kaohsiung. 135 of the 1360 entries were selected to compete in the final. The awarding list was announced on the 26th. 10 Yuntech inventions were selected for the final and 3 of them were granted with 2 gold and 1 silver.

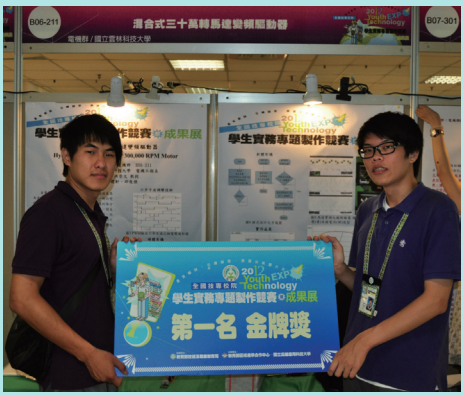
The gold awarded invention for the category of electric engineering, “Mix of Motor and Variable Frequency Drive in High Velocity,” was invented by students Chien-hsun Yang and Chun-chei Chiu under the instruction of Assistant Professor Chung-wen Hung of the Department of Electric Engineering. The main concept of the invention was to put forward a one-mix driving system which provides the usage range for high velocity motors in full frequency segment so as to improve what the six-step trapezoidal in low velocity results. With a stable high driving system, the invention can be further applied to the precision machining industry.

Under the instruction of Assistant Professor Ching-lung Su, students Bo-shun Li, Hsia-chia Huang and Yo-shen Chen of the Department of Electric Engineering created the gold awarded invention in the category of information communication, namely “2D to 3D Cloud System.” The cloud algorithm was integrated with a GPU multi-core platform. By using the algorithm, which transfers graphics to 3D images, the processing speed is made faster. When users upload their photos, the photos become 3D images instantly. Moreover, users can watch 3D images online with the cloud system. The concept is creative and meets the need of nowadays market.

The silver awarded invention in the category of interactive animation, namely “Light Banquet,” was invented by students Shia-ya Huang and Han-su Li under the instruction of Assistant Professor Shih-chang Chen of the Department of Visual Communication Design. The invention presents the concept “a candle lights others and consumes itself.” By integrating the 2 cultures of Taiwanese lanterns and western jack-o’-lanterns, the animation is touching to have everyone immerse in the story.

The copper awarded invention for the category of business, “My Musician,” was invented by students Yi-wei Chen, Chie-ying Wang and Tsu-lin Lin under the instruction of Associate Professor Tung-ming Koo of the Department of Information Management. The invention adopts an Android 2.3.1. platform to write a subprogram with Eclipse software and develop a brand-new portable electronic score reader by Java. Composers can play the instruments directly while the invention makes a notation by itself through the music composition model. The notations can be saved in the invention which reduces the amount of storage of notations for musicians when they have to move around. As all artists of the orchestra are online as a group, the notations can be controlled by Bluetooth, which reduces the possibility of interruption during a play.

YunTech has participated in this competition for several years and has been granted with awards. The 4 selected inventions present that YunTech students own the 2 characteristics of creativity and practice. YunTech’s students are competitive for their future career in the global world and meet the demands of the career market.



The gold awarded invention “Mix of Motor and Variable Frequency Drive in High Velocity”

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